77TH CONGRESS } HOUSE OF REPRESENTATIVES { DOCUMENT
1st Session } { No. 262

COLD SPRING INLET, N. J.

LETTER

FROM

THE SECRETARY OF WAR

TRANSMITTING

A LETTER FROM THE CHIEF OF ENGINEERS, UNITED STATES ARMY, DATED MAY 20, 1941, SUBMITTING A REPORT, TOGETHER WITH ACCOMPANYING PAPERS AND AN ILLUSTRATION, ON RE-EXAMINATION OF COLD SPRING INLET, N. J., REQUESTED BY RESOLUTION OF THE COMMITTEE ON RIVERS AND HARBORS, HOUSE OF REPRESENTATIVES, ADOPTED MAY 29, 1940

JUNE 11, 1941.—Referred to the Committee on Rivers and Harbors and ordered to be printed, with an illustration

WAR DEPARTMENT,
Washington, June 9, 1941.

The SPEAKER OF THE HOUSE OF REPRESENTATIVES.

DEAR MR. SPEAKER: I am transmitting herewith a report dated May 20, 1941, from the Chief of Engineers, United States Army, on reexamination of Cold Spring Inlet, N. J., requested by resolution of the Committee on Rivers and Harbors, House of Representatives, adopted May 29, 1940, together with accompanying papers and illustration.

The Bureau of the Budget has been consulted and advises that, while there would be no objection to the submission of the proposed report for the consideration of the committee, it should be understood that this advice would be without commitment as to the amount that would be required to carry out the national-defense phases of the project.

Sincerely yours,

HENRY L. STIMSON,
Secretary of War.

323825—41

WAR DEPARTMENT,
OFFICE OF THE CHIEF OF ENGINEERS,
Washington, May 20, 1941.

The CHAIRMAN, COMMITTEE ON RIVERS AND HARBORS,
House of Representatives, Washington, D. C.

MY DEAR MR. CHAIRMAN: 1. The Committee on Rivers and Harbors of the House of Representatives, by resolution adopted May 29, 1940, requested the Board of Engineers for Rivers and Harbors to review the reports on Cold Spring Inlet, N. J., submitted in House Document No. 388, Fifty-ninth Congress, second session, with a view to determining whether any modification of the existing project is advisable at the present time. I enclose the report of the Board in response thereto.

2. After full consideration of the reports secured from the district and division engineers, the Board recommends modification of the existing project for Cold Spring Inlet, N. J., to provide an entrance channel 25 feet deep and 400 feet wide, protected by parallel jetties, and extending from the 25-foot depth in the Atlantic Ocean to a line 500 feet harborward of a line joining the inner ends of the jetties; thence 20 feet deep and 300 feet wide to a point 300 feet westerly of the existing pier of the Coast Guard station; all generally as shown on the accompanying map; at an estimated additional cost of $56,000 to complete the project and $30,000 annually for maintenance of the entire project.

3. In a letter dated February 5, 1941, addressed to the Secretary of War, the Secretary of the Navy states that this project is of high importance to the Navy and urges that action be taken to secure appropriations and complete the project as soon as possible. The letter further states that a shoal area lying approximately 1,200 feet west of the existing pier should also be dredged to 20 feet in order to facilitate handling of naval vessels at a pier which is planned for that immediate vicinity as part of the inshore patrol vessel base lay-out. The desired extension of the channel is indicated on the map and the additional cost is estimated at $15,000, making the total first cost of the proposed improvement $71,000.

4. In view of the recommendation of the Secretary of the Navy I recommend modification of the existing project for Cold Spring Inlet, N. J., to provide an entrance channel 25 feet deep and 400 feet wide, protected by parallel jetties, and extending from the 25-foot depth in the Atlantic Ocean to a line 500 feet harborward of a line joining the inner ends of the jetties; thence 20 feet deep and 300 feet wide to deep water in Cold Spring Harbor; all generally as shown on the accompanying map; at an estimated additional cost of $71,000 to complete the project and $30,000 annually for maintenance of the entire project.

Very truly yours,

J. L. SCHLEY,
Major General,
Chief of Engineers.

REPORT OF THE BOARD OF ENGINEERS FOR RIVERS AND HARBORS

WAR DEPARTMENT,
THE BOARD OF ENGINEERS FOR RIVERS AND HARBORS,
Washington, D. C., October 28, 1940.

Subject: Cold Spring Inlet, N. J.
To: The Chief of Engineers, United States Army.

1. This report is in response to the following resolution adopted May 29, 1940:

Resolved by the Committee on Rivers and Harbors of the House of Representatives, United States, That the Board of Engineers for Rivers and Harbors created under section 3 of the River and Harbor Act, approved June 13, 1902, be and is hereby, requested to review the reports on Cold Spring Inlet, New Jersey, submitted in House Document Numbered 388, Fifty-ninth Congress, second session, with a view to determining whether any modification of the existing project is advisable at the present time.

2. Cold Spring Inlet is the navigable channel between the Atlantic Ocean and Cape May Harbor, which lies in the southernmost of the series of tidal lagoons on the coast of New Jersey. It is 5 miles north of Cape May Point. The mean range of tide at the inner end of the inlet is 4.3 feet. The improvement authorized by Congress provides for an entrance channel 25 feet deep and 400 feet wide through the inlet, protected by parallel stone jetties 750 feet apart. Total costs for new work and maintenance to May 31, 1940, have been $1,494,591, including $100,000 contributed by local interests. The latest approved estimate of annual cost of maintenance is $20,000. Cape May Harbor is the southern terminus of the present State-owned New Jersey Intracoastal Waterway, the further improvement of which as a Federal project was recommended in a report transmitted to Congress on January 20, 1939 (H. Doc. No. 133, 76th Cong., 1st sess.)

3. Cape May, with a permanent population of 3,000, is a resort community and the principal occupations, exclusive of catering to the large tourist trade, are commercial fishing and boat building and repair. The area has excellent rail and highway facilities. Commerce of the waterway during the past decade varied between a low of 11,000 tons in 1934 and 22,000 tons in 1935 and in 1939 was 17,100 tons, consisting principally of sea food and petroleum products. In that year vessel traffic through the inlet included 14,600 round trips of Government vessels, barges, tugs, motor vessels, and fishing craft drawing up to 14 feet.

4. Local interests request extension of the existing project to deep water in Cape May Harbor, with maintenance of the extended project to a depth of 20 feet or more. This request has the approval of the Coast Guard staff stationed at the Cape May base, of maritime interests in Cape May, and of the Commandant of the Fourth Naval District. The improvement will enable Coast Guard cutters to reach their base for service and supplies, provide a harbor of refuge for tugs and barges during storms, and provide a base for patrol vessels in time of national emergency. Local interests offer to furnish, free of cost to the United States, spoil-disposal areas.

5. The district engineer estimates the initial cost of dredging a channel 20 feet deep and 300 feet wide from the inner end of the existing project to that depth in Cape May Harbor, a distance of

5,600 feet, at $56,000, with annual carrying charges, including maintenance, of $12,520. Cape May Harbor is in regular use by the United States Navy and Coast Guard and adequate access is required by these governmental agencies. The proposed dredging will fulfill this need and make Cape May Harbor a valuable harbor of refuge. The district and division engineers concur in recommending the improvement, subject to certain provisions of local cooperation.

VIEWS AND RECOMMENDATIONS OF THE BOARD OF ENGINEERS FOR RIVERS AND HARBORS

6. The Board concurs in general in the views and recommendations of the reporting officers. When originally improved, the inner end of the project channel through the inlet met naturally deep water in the harbor. Shoaling that has been in progress over many years has gradually reduced that natural depth to an extent that now limits the usefulness of the inlet. The project should now be extended so as again to reach adequate natural depth in the harbor. The improvement will provide a safe harbor for the use of the United States Navy and Coast Guard services during times of national emergency. The Board therefore recommends modification of the existing project for Cold Spring Inlet, New Jersey, to provide an entrance channel 25 feet deep and 400 feet wide, protected by parallel jetties, and extending from the 25-foot depth in the Atlantic Ocean to a line 500 feet harborward of a line joining the inner ends of the jetties; thence 20 feet deep and 300 feet wide to a point 300 feet westerly of the existing pier of the Coast Guard Station: all generally as shown on the accompanying map; at an estimated additional cost of $56,000 to complete the project and $30,000 annually for maintenance of the entire project.

For the Board:

THOMAS M. ROBINS,
Brigadier General, Corps of Engineers,
Senior Member.

REEXAMINATION OF COLD SPRING INLET, N. J.

SYLLABUS

Cold Spring Inlet is located on the ocean shore of New Jersey 5 miles north of Cape May at the entrance to Delaware Bay. The inlet is maintained under a Federal project that provides an entrance channel 25 feet deep and about 1 mile long protected by stone jetties. Between the inner end of the project channel and deep water in Cape May Harbor are shoal areas that restrict navigation.

The district engineer finds that the provision of a channel in Cape May Harbor is in the interest of national defense and recommends extension of the existing project to provide a channel 300 feet wide and 20 feet deep to deep water in Cape May Harbor.

WAR DEPARTMENT,
UNITED STATES ENGINEER OFFICE,
Philadelphia, Pa., June 24, 1940.

Subject: Review of reports on Cold Spring Inlet, N. J.
To: The Chief of Engineers, United States Army. [Through the Division Engineer, North Atlantic Division.]

1. *Authority.*—This review report is submitted, pursuant to departmental instructions, in compliance with the request in the resolution here quoted:

Resolved by the Committee on Rivers and Harbors of the House of Representatives, United States, That the Board of Engineers for Rivers and Harbors created under section 3 of the River and Harbor Act, approved June 13, 1902, be and is hereby, requested to review the reports on Cold Spring Inlet, New Jersey, submitted in House Document numbered 388, Fifty-ninth Congress, second session, with a view to determining whether any modification of the existing project is advisable at the present time.

2. The report under review was a favorable report on examination and survey of Cold Spring Inlet, New Jersey, submitted January 2, 1907, as provided for in section 9 of the River and Harbor Act of March 3, 1905.

3. *Description.*—Cold Spring Inlet provides a navigable channel between the Atlantic Ocean and Cape May Harbor and the New Jersey Inland Waterway. It is located about 5 miles north of Cape May Point which is the southern extremity of New Jersey.

4. Cape May Harbor is approximately 1¾ miles long and ⅓ mile wide, lying parallel to and approximately ⅝ mile from the ocean shore. Originally this harbor was a tidal lagoon about 60 acres in area, into which emptied a number of small creeks and thoroughfares from the marshes to the north. It had a depth of about 6 feet. The lagoon was enlarged by dredging to obtain material to reclaim low land between the lagoon and the ocean prior to adoption of the Federal project for improvement of the inlet. After dredging was completed in 1908 the harbor had a depth of about 30 feet.

5. At the end of the harbor lies the city of Cape May and the principal commercial and fishing wharves. South of the harbor near the inlet are located the United States Coast Guard base and naval air station. From the end of the harbor the New Jersey Inland Waterway leads through the coastal channels and bays to Manasquan Inlet, 111 miles north.

6. The controlling depth in the inlet channel was 20 feet in January 1940. The controlling depth between the inner end of the inlet channel and the Coast Guard base was less than 15 feet in May 1940. Considerable shoaling in the east half of the harbor has occurred in recent years. The harbor now has a depth of 20 feet or more over an area of about 1 square mile.

7. The normal range of tide at the inner end of the inlet channel is 4.3 feet.

8. *Tributary area.*—The area served by Cold Spring Inlet and Cape May Harbor is a seashore resort. From Cape May to Sandy Hook ocean frontage is a succession of seashore resorts. The chief industry is commercial fishing for the metropolitan markets of Philadelphia and New York. Boatbuilding and repair for local needs is carried on. The only town of importance in the locality is Cape May. It has a permanent population of about 3,000, augmented in summer by many temporary residents.

9. Railroad service in the locality is provided by the Pennsylvania-Reading seashore lines. Established bus and trucking lines also carry passengers and freight. Highways are ample.

10. *Bridges.*—No bridges cross the waters of the inlet or the harbor area. A highway (N J Route 4) drawbridge crosses Cape Island Creek about 0.15 mile upstream from the head of the harbor. Over the channel of the New Jersey Inland Waterway, about 0.2 mile north of the channel from the inlet into the harbor, a drawbridge carries a newly constructed, county owned, toll highway. The bridge

over Cape Island Creek is owned by the New Jersey State Highway Department. The bridge over the inland waterway is owned by Cape May County. Both were constructed under War Department permits.

11. *Prior reports.*—An unfavorable preliminary examination report on Cold Spring Inlet was submitted in 1891 and printed in House Executive Document No. 39, Fifty-first Congress, second session. The second, and last, prior report was the report under review (H. Doc. 388, 59th Cong., 2d sess.) which became the basis for the existing project.

12. *Existing project—Local cooperation.*—Prior to adoption of the existing project no work of improvement had been done under Federal auspices at Cold Spring Inlet. The existing project was adopted by the River and Harbor Act of March 2, 1907. It provides for an entrance channel 25 feet deep at mean low water and 400 feet wide through the inlet, protected by parallel stone jetties 750 feet apart. Expenditure of Federal funds on the project was made conditional upon a cash contribution by local interests of $100,000, the deeding to the United States of right-of-way and land for lighthouses, life-saving station, and a depot for engineer supplies, and also upon completion by local interests of dredging in the harbor in accordance with an accepted plan. The required dredging was not completed (estimated 80-percent complete) in the northeast end of the harbor. All other requirements were fulfilled by the end of 1908.

13. The work authorized under the project was completed in 1917. The total cost of new work and maintenance to May 31, 1940, was $1,494,590.92. The latest approved (1928) estimate for annual maintenance is $20,000. The estimate appears to be adequate.

14. No changes in the existing project have been recommended to the Congress.

15. *Other improvements.*—The only navigation improvement made by local interests, other than those made under conditions prescribed in the project, is the work done by the State of New Jersey in providing and maintaining the inland waterway referred to in paragraph 5. Adoption of a Federal project for improvement and maintenance of this waterway at a depth of 12 feet by the United States was recommended to the Congress in a report submitted January 3, 1939, and printed in House Document No. 133, Seventy-sixth Congress, first session. The project recommended for adoption includes provision of a sea-level canal from Cape May Harbor to Delaware Bay above Cape May.

16. *Terminal and transfer facilities.*—Commercial terminal and transfer facilities in Cape May Harbor are concentrated in the west end of the harbor and adjacent to Cape Island Creek above the drawbridge. These facilities include Schellingers wharf, the principal point for landing, icing, storing, and shipping food fish and supplying fishing vessels; one public and several private wharves where fuel and supplies can be obtained, numerous boathouses and several boat yards. A well-equipped marine railway adjoins Schellingers wharf. Others are operated in conjunction with the boat yards. The facilities at this end of the harbor include a plant that receives, stores, and distributes petroleum products. The facilities mentioned serve the public adequately and without discrimination. Ample harbor frontage awaits a demand for expansion.

17. On the south side of the harbor, occupying the north half of its length, the United States Navy has established a naval air station and Coast Guard base. The reservation extends from the harbor to the ocean. The establishment includes wharves, runways, hangars, shops, and buildings for housing personnel. During the World War surface vessels and submarines on patrol duty were based at this station. Its present use is confined to naval air activities and operations of the Coast Guard.

18. North of Cape May Harbor along the New Jersey Inland Waterway as far as Wildwood are numerous docks and wharves used by a considerable fleet of commercial and sport fishing craft. These facilities and the activities they serve are supplemental to Cape May Harbor, but are served adequately by the inlet channel now provided. They would not be affected by the improvement desired by interests in Cape May.

19. *Improvement desired.*—The improvement desired is extension of the existing project to deep water in Cape May Harbor with maintenance of the project thus extended to a depth of 20 feet or more. This was proposed by the Coast Guard staff stationed at the Cape May base and by maritime interests in Cape May. The proposal is supported by shipping interests in Philadelphia and Baltimore and by the United States Navy.

20. The Coast Guard desire the improvement in order that their cutters may reach the base for regular service and supply, which they are now unable to do.

21. Commercial shipping interests in Philadelphia and Baltimore contend that the harbor would provide a valuable refuge for tugs and their tows when caught in storms that make lower Delaware Bay hazardous.

22. The Commandant of the Fourth Naval District considers that improvement to 20-foot depth would be urgently needed in event of a national emergency to enable use of the harbor and Navy facilities as a base for inshore-patrol vessels. The patrol fleet would consist of motor vessels of 75 feet length, trawlers drawing 15 feet, destroyers of length up to 325 feet and drawing 16 feet, and Coast Guard cutters operated under Navy control, drawing 16 feet.

23. A public hearing was not held. Such procedure would have delayed prompt submission of this report. Interested parties and local authorities have been consulted and their views are epitomized in preceding paragraphs. Letters received relative to the improvement are submitted with this report in appendix I.[1]

24. Cash cooperation to assist in defraying the cost of the improvement has not been offered. Local interests have offered the use of adjoining marshes for disposing of spoil from dredging.

25. *Commerce.*—Statistics for the past 19 years show that edible fish of all kinds, and menhaden for use as fertilizer material, represent the principal commodities of freight traffic. This commerce has been divided between Cape May, within the harbor proper, and Wildwood on the New Jersey Inland Waterway. Other items of commerce during this period included anthracite and bituminous coal, lumber and its manufactures, clams, seed oysters, fish scrap, fish oil, gasoline, and

[1] Not printed.

kerosene. The only recently developed traffic is in petroleum products. Commerce for the years 1921–39, is tabulated as follows:

Freight traffic, Cold Spring Inlet, N. J., 1921–39, exclusive of ice, fuel, and other fishing operation supplies

Year	Total	Principal commodities						
		Fish, edible	Fish, menhaden (for fertilizer)	Oysters and clams	Coal	Lumber, barrels, baskets	Petroleum products	Miscellaneous
	Tons	*Tons*	*Tons*	*Tons*	*Tons*	*Tons*	*Tons*	*Tons*
1921	5,500	2,400	2,800	300				
1922	12,395	225	4,250	250		3,985		3,675
1923	18,655	2,236	9,000	683	4,200	525		2,011
1924	17,100	3,000	5,000	610	7,000	300		1,190
1925	33,052	600	19,000	667	10,000	785		2,000
1926	6,123	2,326			3,749			48
1927	8,479	3,011			3,000	300		2,168
1928	16,141	5,450	7,125	25	2,836	600		105
1929	10,234	5,100	998	1,300	1,836			800
1930	14,066	10,048	1,690	350	1,978			
1931	16,345	9,909	4,762		1,674			
1932	17,557	7,697	7,323			190	105	2,242
1933	20,211	6,571	13,640					
1934	11,116	4,416	6,700					
1935	21,908	12,208	9,650					
1936	16,977	10,127	6,850					
1937	13,128	12,678		450				
1938	21,626	13,530	6,600				1,496	
1939	17,134	7,854	7,850	160			1,270	

26. Local interests interviewed are of the opinion that the present channel has sufficient depth to take care of prospective commerce for some time to come. Further shoaling, however, will adversely affect the larger fishing boats operating from the harbor.

27. *Vessel traffic.*—The existing vessel traffic through the inlet is shown in the following table:

Trips and drafts of vessels, 1939

IN-BOUND

Draft (feet)	Motor vessels, commercial fishing	Motor vessels, pleasure fishing	Tugs	Barges	Government vessels and yachts [1]	Total
12 to 14	577				3	580
10 to 12	680		3			682
8 to 10	541			3	2	546
6 to 8	1,555	57			6	1,618
Under 6	7,350	3,783			42	11,175
Total	10,703	3,840	3	3	53	14,602
Total net registered tonnage	114,748	19,200	129	1,500	2,485	138,062
Passengers: Excursion		50,320				50,320

OUT-BOUND

12 to 14	2				1	3
10 to 12	580		3			583
8 to 10	680		1		2	683
6 to 8	541	57		3	9	610
Under 6	8,900	3,783			57	12,740
Total	10,703	3,840	4	3	69	14,619
Total net registered tonnage	114,748	19,200	266	1,500	2,366	138,080
Passengers: Excursion		50,320				50,320

[1] Represents Coast Guard vessels and private yachts using the Chesapeake & Delaware Canal to and from Cold Spring Inlet. Coast Guard vessels stationed at Cape May, and private yachts and commercial vessels from other areas made numerous trips in and out of the inlet, but no record is available as to the number.

28. *Difficulties attending navigation.*—Cutters of the Coast Guard have difficulty reaching the wharves at the Coast Guard base because of insufficient depth of water. These craft need a depth of about 20 feet, whereas the controlling depth when last examined in May 1940 between the Coast Guard base and the inner end of the project channel was less than 15 feet. In January 1940 the controlling depth of the inlet channel was 20 feet. Commercial fishermen and other freight carriers sometimes drag bottom on the shoal areas in Cape May Harbor when heavily loaded at low water. Pleasure craft are reported to have difficulty. The U. S. dredge *Absecon* while stationed at Cold Spring Inlet for maintenance dredging of the existing project on several occasions dredged the shoals referred to above to provide access to the Coast Guard wharf for fuel and supplies. This dredging has been of considerable assistance to navigation in the harbor, particularly to the Coast Guard cutters.

29. *Survey.*—Data obtained in the course of routine examinations of Cold Spring Inlet channel and Cape May Harbor are adequate for the purpose of this report. A field survey was not made. Using data at hand, a map, file No. 5353, has been prepared and is submitted as plate I of this report. United States Coast and Geodetic Survey chart 3243 covers the waters with which this report is concerned.

30. *Plan of improvement.*—The minimum improvement that will meet the requirements of the Coast Guard cutters regularly stationed at the base and of naval craft of the inshore patrol that the Navy would desire to station at the base in a national emergency is a channel 20 feet deep and 300 feet wide extending about 5,600 feet from the inner end of the existing project channel in the inlet to water of 20-foot depth in Cape May Harbor. This channel is shown on plate 1 of this report. The dredging of this channel including an allowance of 2 feet overdepth and side slopes of 1 on 3 will involve the removing of about 350,000 cubic yards. The work is estimated to cost 16 cents a cubic yard, or a total of $56,000. The annual charge for interest and amortization of obsolescence considered as a flat rate of 4½ percent amounts to $2,520. Cost of annual maintenance is estimated at $10,000. The total Federal annual cost, therefore, is $12,520.

31. *Seaplane bases.*—Cape May Harbor is in regular use by the Coast Guard and the Navy as a base for operating seaplanes. This use of the harbor would not be affected by the dredging contemplated in the plan of improvement.

32. *Shore-line changes.*—The improvement proposed contemplates no change in the jetties at the inlet. Deepening the inlet channel with deepening and widening the channel in the harbor should have no appreciable effect on the tidal volume passing through the inlet. There is no reason to expect a noticeable change in conditions affecting shore lines as result of the channel changes proposed.

33. *Land reclamation.*—Deposition of spoil from dredging might improve marshy areas adjacent to Cape May Harbor.

34. *Oysters.*—Cape May Harbor has no natural beds of oysters, neither is it used for oyster propagation or culture. The work proposed would not affect future use of the area in respect to the oyster industry.

35. *Water power—Flood control.*—There is no possibility of developing water power in this locality, neither is there any problem in preventing or protecting from floods.

36. *Wildlife.*—The improvement proposed would have no adverse effect on wildlife.

37. *Discussion.*—The existing project at Cold Spring Inlet provides a deep entrance channel between jetties suitable for ocean-going ships. When the project was adopted in 1907 this channel connected with deep water in Cape May Harbor. Shoals in the eastern end of Cape May Harbor have now made it impractical for ships of more than 12-foot draft to reach deep water in the harbor. The dredging of these shoals by the U. S. dredge *Absecon* to provide access for itself to the Coast Guard base has helped to keep the channel open.

38. Access to the Coast Guard base is needed by the Coast Guard cutter regularly assigned to the base and for other cutters temporarily stationed at the base when the crews are receiving drill and small-arms training ashore. In the event of a national emergency, Cape May Harbor would certainly be used again as a base of operation for the inshore patrol.

39. In its present condition Cold Spring Inlet is inadequate as a refuge for coastwise shipping. Deep-draft vessels that can safely navigate the entrance channel between the jetties have no place to go inside the inlet.

40. The cost of new work on this project has been about a million dollars. For an expenditure of about $56,000 to provide a channel in Cape May Harbor, the usefulness of the project can be greatly increased.

41. *Conclusions.*—(*a*) The proposed extension of the project is in the interest of national defense and should be provided without delay.

(*b*) This channel extension would make Cape May Harbor a valuable harbor of refuge for coastwise shipping.

(*c*) The cost of this extension is small compared with the cost of the existing entrance channel and the cost is small compared with the general benefits to navigation and national defense.

42. *Recommendations.*—The district engineer recommends that the project for Cold Spring Inlet, N. J., be modified to provide for a channel 20 feet deep and 300 feet wide from the inner end of the inlet channel to water of 20-foot depth in the harbor, a distance of about 5,600 feet, at an estimated cost of $56,000 for new work and $10,000 annually for maintenance in addition to the $20,000 provided for the existing project, or $30,000 in all. The funds necessary for completion of the work should be made available in one allotment.

H. B. VAUGHAN,
Major, Corps of Engineers,
District Engineer.

[First endorsement]

OFFICE, DIVISION ENGINEER,
NORTH ATLANTIC DIVISION,
New York, N. Y., June 27, 1940.

To the CHIEF OF ENGINEERS, United States Army.

1. I concur generally in the views and in the favorable recommendation of the district engineer. However, it is believed that the recommendation should restate the entire project as modified in definite terms.

2. I therefore recommend that the project be so modified as to provide for an entrance channel 25 feet deep and 400 feet wide, protected by two parallel jetties, and extending from the 25-foot contour in the Atlantic Ocean to a line about 500 feet harborward of a line joining the inner ends of the jetties, thence 20 feet deep and 300 feet wide to a point about 300 feet westerly of the existing pier of the Coast Guard station, all as shown on the accompanying map, at an estimated further cost of $56,000 for the necessary new work to complete the project, and $30,000 annually for maintenance of the entire project.

J. N. HODGES,
Colonel, Corps of Engineers,
Division Engineer.

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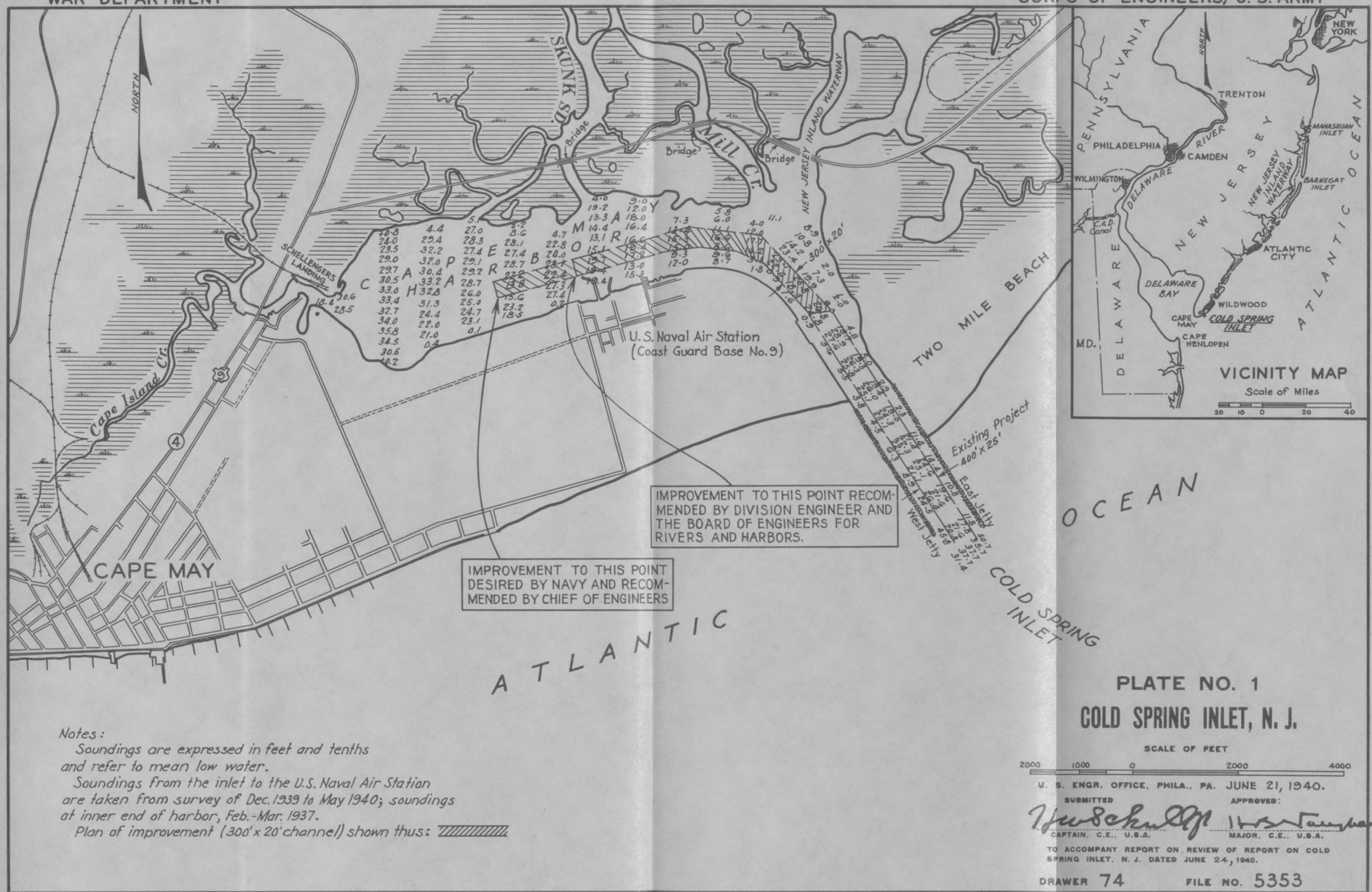
WAR DEPARTMENT

CORPS OF ENGINEERS, U. S. ARMY



Notes:

Soundings are expressed in feet and tenths and refer to mean low water.

Soundings from the inlet to the U.S. Naval Air Station are taken from survey of Dec. 1939 to May 1940; soundings at inner end of harbor, Feb.-Mar. 1937.

Plan of improvement (300' x 20' channel) shown thus: ▨

PLATE NO. 1

COLD SPRING INLET, N. J.

SCALE OF FEET

2000 1000 0 2000 4000

U. S. ENGR. OFFICE, PHILA., PA. JUNE 21, 1940.

SUBMITTED: CAPTAIN, C.E., U.S.A.

APPROVED: MAJOR, C.E., U.S.A.

TO ACCOMPANY REPORT ON REVIEW OF REPORT ON COLD SPRING INLET, N. J. DATED JUNE 24, 1940.

DRAWER 74 FILE NO. 5353

HOUSE DOC. NO. 262, 77TH CONG., 1ST SESSION

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